

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (*Previously presented*) The kind of monitor which use the solid graphic display
2 technique to generates spatial images on a set or block of multiple screens paced as
3 overlapped multi-layers, characterized by:

4 generating three dimensional video images in color using a single block of overlapped
5 color screens, where said single block of screens can have a flat or curved shape, or
6 combination of both shapes, which only depends on the shape of the material with which said
7 overlapped block of screens is constructed; and

8 the color screens which comprise the block are illuminated with only one light source
9 in common placed in the rear of the block of screens, that is, behind the more distant screen
10 from the viewer, in order to illuminate simultaneously and homogeneously all the screens
11 from the depth of the kind of monitor and through all the screens.

1 2. (*Previously presented*) The electronic device for handling signal which is
2 characterized by:

3 replicating a determinate number of the original video image of an object filmed with
4 a video camera, obtaining several identical images from the original image, wherein each one
5 of the images is handled in a different way in order to modify its information according to the
6 corresponding distances determined by any known method that are between several points of

7 said filmed object and said camera, in order to enable or disable the corresponding pixels
8 from each one of the images obtained from said original image, obtaining new and different
9 images which are displayed in the same quantity of independent LCD screens that compose
10 the kind of monitor from claim 1;

11 editing the visual edition by computer programming in order to obtain three-
12 dimensional images from the existing flat format video films, programming the depth
13 information in order to add from the determined plane in the depth direction the display of
14 each pixel that forms the video image which corresponds to said plane, or well to generate
15 both the video images and depth data completely by computer, using animation techniques by
16 computer or virtual reality, wherein there will be shown on each screen in the kind of monitor
17 of multiple screens of claim 1, a different screen in correspondence with the desired
18 perspective, for display; and

19 serving as interface to the video and depth signal used in the kind of monitor of
20 multiple overlapped color screens related according to claim 1.

1 3. (*New*) A solid graphic display device, which is featured by:
2 to generate stereoscopic three dimensional images on a block comprising by several
3 overlapped transparent LCD screens at color, as overlapped layers;
4 to generate the stereoscopic three dimensional colored video images on only one block of
5 such overlapped LCD screens device at color;
6 the block of overlapped screens at color which can be flat or curve shaped, or a
7 combination of those shapes, which is only depending upon the shaping of the material used
8 to construct such a block of overlapped screens;

9 said block of overlapped screens is illuminated with a light source located at the back
10 plane, standing at the rear of the most distant screen from the viewer, in order to
11 homogeneously light at the same time in all the screens; and

12 to have only one color filter over the screen more closed to the viewer, or one color
13 filter over each LCD screen, in order to display stereoscopic colored video images on said
14 overlapped screens device.

1 4. (*New*) An electronic device used to process signals, which is featured by:

2 multiply a certain times one image signal from an original video image of an object
3 which is recorded by a video camera, and thus obtaining several images equal to the original
4 image, and every image is differently processed in order to change its information accordingly
5 to the corresponding defined distance between several points on the recorded object and the
6 camera, in order to activate or deactivate the corresponding pixels in each image obtained
7 from the original image, and thus generating new and different images which are displayed on
8 the same amount of independent LCD screens that are forming the device referred to the
9 claim 3;

10 to modify each video image accordingly to the corresponding distance or depth range,
11 generating new video image signals in RGB format, where each new video signal is
12 corresponding to a certain distance level;

13 the application for the visual edition of computer programs in order to obtain three
14 dimensional images from the existing flat format recordings video images, by programming
15 the depth information to add it to a certain depth plane, and directing the display for each
16 pixel that forms the video image in order to make it correspond to the same plane, or also to

17 create wholly the video images and the depth data with a computer, by using computer aided
18 animation or virtual reality techniques, wherein each screen in the device with several
19 overlapped screens concerning to the claim 3; and

20 to be used as an interface for the video and depth signals that uses the device of
21 several overlapped color screens of the claim 3.

1 5. (*New*) An apparatus that uses the flat image colored video signal from a recorded
2 object using a video camera, and at the same time the depth signal for several points in such a
3 recorded object is searched by a sonar system, wherein both, video and depth signals, are
4 synchronized in order to display in real time a stereoscopic three dimensional colored video
5 image of such object on the device of several overlapped screens of claim 3.

1 6. (*New*) A device to process several sonar or dept signals, which is featured by:
2 to perform a simultaneous sampling of distances over several points on the surface of
3 one or more object to determine the existing distance between the several points on that
4 objects and the sonar device;

5 to convert to an only one analog or digital signal the several signals of the distances
6 sampled by a sonar system, where such signal contains the information about the depth for the
7 several points of the objects;

8 to count the amount of acoustic waves which are detected by said sonar system, and to
9 compare the count with a certain integer number;

10 to use a flat or curved plate prepared with several fretwork cavities to the way of little
11 parabolics as directional acoustic collector, in order to guide to the front the transmitted or
12 received acoustic signals; and

13 to be used to provide with the depth signal information which is used by the device of
14 several overlapped color screens of claim 3.

1 7. (*New*) A device which is used to store and reproduce the analog or digital signals with the
2 sound, the video and the depth information, featured by:

3 to store said information during the recording mode in an electromagnetic tape device
4 or an electronic recording device, which has three respective available tracks; and
5 to reproduce said information during the playing mode in order to display the stored
6 stereoscopic colored video images on the device according to claim 3.